

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-4 (Canceled)

Claim 5 (Currently Amended)

A substrate treating apparatus for performing a predetermined treatment of a plurality of substrates as immersed in a heated treating solution, comprising:

a controller for controlling a processing time for immersing said substrates to be treated, said controller comprising:

a substrate count acquiring device for acquiring a count of said substrates to be treated;

a storage device for storing beforehand a relationship between said count of the substrates and a processing time such that a processing time for immersing said substrates in the heated treating solution is progressively extended as said count of said substrates increases, and

wherein predetermined ranges of substrate counts are stored, such that a ~~fixed~~ processing time ~~for is assigned to a~~ an entire predetermined range of counts of said substrates corresponds to a predetermined immersion time for one of said counts in said predetermined range; and

a processing time determining device for determining said processing time according to the count of said substrates acquired by said substrate count acquiring device, by referring to said relationship stored in said storage device; and further comprising

a treating tank for immersing said substrates in the heated treating solution for the processing time determined by said processing time determining device.

Claim 6 (Previously Presented)

A substrate treating apparatus as defined in claim 5, wherein said substrate count acquiring device comprises a transmission type optical sensor.

Claim 7 (Previously Presented)

A substrate treating apparatus as defined in claim 5, wherein said substrate count acquiring device comprises a reflection type optical sensor.

Claim 8 (Previously Presented)

A substrate treating apparatus as defined in claim 5, wherein said substrate count acquiring device comprises a CCD camera.

Claim 9 (Previously Presented)

A substrate treating apparatus as defined in claim 5, further comprising a container rest for receiving a container storing said substrates to be treated, said substrate count acquiring device counts said substrates in said container placed on said container rest.

Claim 10 (Previously Presented)

A substrate treating apparatus as defined in claim 9, wherein said substrate count acquiring device is mounted on a shutter provided for opening and closing an opening in a partition acting as an atmospheric barrier between said container rest and said treating tank.

Claim 11 (Previously Presented)

A substrate treating apparatus as defined in claim 9, wherein said substrate count acquiring device is disposed separately from a shutter provided for opening and closing an opening in a partition acting as an atmospheric barrier between said container rest and said treating tank.

Claim 12 (Previously Presented)

A substrate treating apparatus as defined in claim 9, wherein said substrate count acquiring device is mounted on a substrate loading robot for fetching said substrates to be treated

from said container and depositing treated substrates in said container.

Claim 13 (Previously Presented)

A substrate treating apparatus as defined in claim 5, wherein said substrate count acquiring device is arranged to acquire the count of said substrates to be treated, in form of data given from an external device.

Claim 14 (Previously Presented)

A substrate treating apparatus as defined in claim 5, wherein said substrate count acquiring device is arranged to acquire the count of said substrates to be treated, in form of a key input from a control unit.

Claim 15 (Previously Presented)

A substrate treating apparatus as defined in claim 5, wherein said treating tank is arranged to withdraw said substrates from said heated treating solution upon lapse of said processing time, and immerse said substrates in a cleaning liquid.

Claim 16 (Previously Presented)

A substrate treating apparatus as defined in claim 5, wherein said treating tank is arranged to introduce a cleaning liquid into a treating tank storing said heated treating solution upon lapse of said processing time, to replace said treating solution in said treating tank with said cleaning liquid.